

BLOOD LEAD LEVELS IN CHILDREN

At a Glance

Number of blood lead screenings of children
1994 32,447
1998 35,576
2000 21,412

Number of children with blood lead poisoning
1994 302
1998 327
2000 318

Number of children with blood lead levels of concern
1994 4,150
1998 4,220
2000 1,806

Indicator 8. Blood Lead Levels in Children

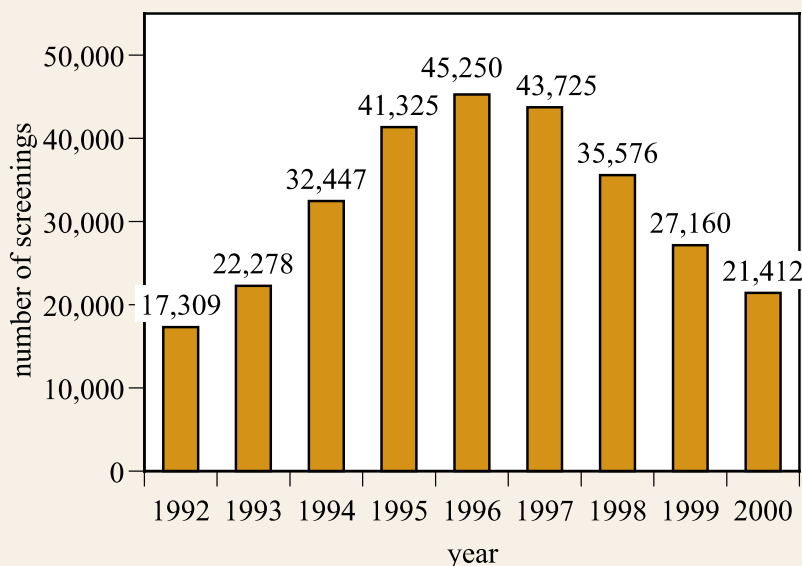
Background Lead poisoning is considered to be one of today's most preventable child health problems. About one in 11 children in America has high levels of lead in his/her blood, according to the Centers for Disease Control and Prevention. The long-term effects of lead exposure in a child can include learning disabilities, decreased growth, hyperactivity, impaired hearing and even brain damage. If caught early, these effects can be limited by reducing exposure to lead or by medical treatment.

The use of lead in consumer products has dramatically declined since the 1970s and 80s. Leaded gasoline was phased out beginning in 1985 and after Dec. 31, 1995 was no longer available in the United States. Lead-based paint was banned for domestic use in 1978. But the historic deposition of lead in soils remains a problem, particularly in urban areas. Lead-based paint in older homes has become a primary source of lead exposure to children. The U.S. Department of Housing and Urban Development estimates that 64 million dwellings, 75 percent of the homes built before 1978, have lead-based paint.¹ An estimated 875,000 homes in Kentucky could contain lead-based paint, 148,750 of which are home to children under six years of age—the age group most susceptible to lead poisoning.

Goal In 1991, the U.S. Public Health Service established the goal of eliminating childhood lead poisoning by 2011.² In conjunction with this goal, the Centers for Disease Control and Prevention (CDC) issued guidelines calling for children age one through five to be screened for lead exposure. In 1997, the CDC determined that there was a declining trend of average blood lead levels in children and revised its guidelines to better target children at risk.³

Progress The Kentucky Cabinet for Health Services conducts programs for lead poisoning prevention, child blood-lead testing and public education about the hazards of lead. In 2000, local health departments conducted 21,412 blood-lead screenings of children under the age of six. The tests found that 318 children (1.48 percent of those tested) had blood lead levels of 20 micrograms per deciliter of blood (µg/dl) or above, high enough to cause severe and

Measure 1. Blood Lead Screenings in Kentucky Children



TOXIC POLLUTANTS

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adverse health impacts. Another 8.4 percent of the children tested (1,806) had blood lead levels of concern (10 to 19 $\mu\text{g}/\text{dl}$) which could result in behavioral and developmental problems. The U.S. EPA has issued new lead standards to better protect the health of children. These standards are designed to lower the amount of lead a child is exposed to in his or her environment.⁴

Over the past four years, there has been a dramatic decline in the number of children screened for lead poisoning by local health departments. The Cabinet for Health Services attributes the decline in part to the implementation of the Medicaid Managed Care in two regions, which has resulted in the use of private providers in lieu of local health departments. This has made tracking lead testing difficult. State officials also report that many private physicians do not regularly screen children for lead and that the problem of lead in children may be greater than what is currently known. The Cabinet plans on implementing better tracking procedures for lead blood testing and encouraging private physicians to test their patients for lead.

Footnotes

1. "Everything you ever wanted to know about regulations but were afraid to ask," U.S. EPA, Web site - http://www.epa.gov/region08/community_resources/muni/other/olead.html.
2. CDC Performance Plans, Centers for Disease Control, Web site - <http://www.cdc.gov/od/perfplan/2000xiilead.htm>.
3. CDC's Lead Poisoning Prevention Program, Centers for Disease Control, Web site - <http://www.cdc.gov/nceh/lead/factsheets/leadfcts.htm>.
4. "EPA Announces Tough New Standards for Lead," U.S. EPA, Press Release, December 26, 2000.

Measures - notes and sources

Measure 1. New data collection system started in 1996. Source: Ky. Department for Public Health.

Measure 2. $\mu\text{g}/\text{dl}$ - micrograms per deciliter of blood. New data collection system started in 1996. Source: Ky. Department for Public Health.

Measure 2. Blood Lead Levels in Kentucky Children

